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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,774	11/17/2003	Donald Siu	PD-200349	2413
20991	7590	09/21/2006	EXAMINER	
THE DIRECTV GROUP INC			PAYNE, DAVID C	
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DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/714,774

Applicant(s)

SIU, DONALD

Examiner

David C. Payne

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because drawings contain blank boxes and other shapes (Figure 1, #112, #116) and (Figure 2, #112, #116, #120), which are not widely, recognized engineering symbols. Applicant must supply a suitable legend. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following are direct quotations of 37 CFR 1.84(n), (o), repeated below:

- (n) ***Symbols.*** Graphical drawing symbols may be used for conventional elements when appropriate. The elements for which such symbols and labeled representations are used must be adequately identified in the specification. Known devices should be illustrated by symbols which have a universally recognized conventional meaning and are generally accepted in the art. **Other symbols which are not universally recognized may be used, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable.**
- (o) ***Legends.*** Suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

Art Unit: 2613

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

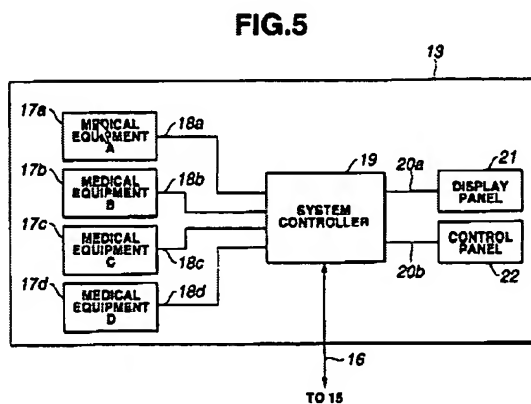
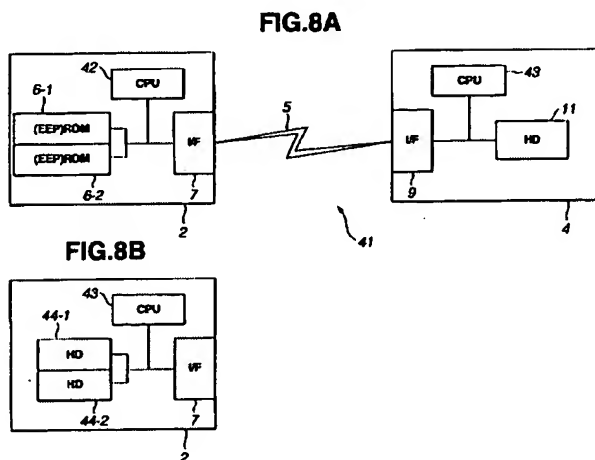
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 6-10, 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by **Uchikubo et al.** US 6480762 B1 (Uchikubo).

Re claims 1-3, 6-10, 12-18 Uchikubo disclosed



Next, the third embodiment of the present invention will be described with reference to FIG. 8A to FIG. 9.

The configuration of a medical apparatus supporting system in accordance with the present embodiment is the same as that shown in FIG. 1. Moreover, the configuration shown in FIG. 8A corresponds to the configuration of the medical apparatus supporting system shown in FIG. 2.

A medical apparatus supporting system 41 shown in FIG. 8A consists mainly of medical equipment 2 having a communication facility and a remote control computer 4 linked to the medical equipment 2 over a communication line 5 over which information is transmitted.

The medical apparatus supporting system 41 includes a plurality of program storage means in which a program for instructing the medical equipment 2 how to act is stored, or more particularly, two ROMs 6-1 and 6-2 as shown in FIG. 8A.

The medical equipment 2 includes a CPU 42 connected to a communication interface 7 and the two ROMs 6-1 and 6-2. The CPU 42 controls the actions of the medical equipment 2 according to the program stored in the ROM 6-1 or ROM 6-2. The programs stored in the ROM 6-1 and ROM 6-2 are rewritten under control of the

Art Unit: 2613

CPU 42. The ROM 6-1 and ROM 6-2 are realized with, for example, nonvolatile electrically reprogrammable EEPROMs (or flash memories).

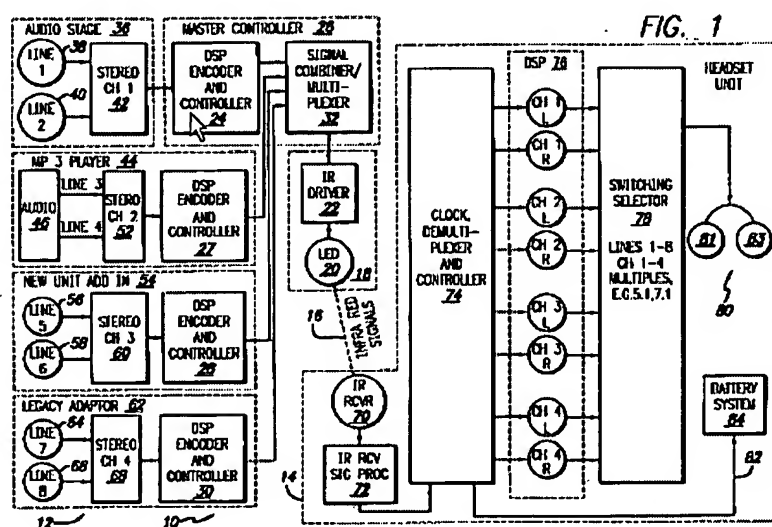
The remote control computer 4 includes an interface 9 connected to the communication line 5 and a CPU 43 connected to a program storage means (hard disk) 11 in which a rewriting program is stored. The CPU 43 controls transmission of the program used to rewrite an old program. An operation program for instructing the CPU 43 how to act is also stored in the hard disk 11.

According to the present embodiment, at least two memory means are included as memory means in which a program to be transmitted is stored. Even if transmission of data over the communication line 5 is not performed smoothly a program can be rewritten reliably, col./line(s): 10/10-45.

A simple resistor is used to identify a terminal. Alternatively, a rotary switch, a variable resistor, or any other variable hardware device will do. Otherwise, a procedure of identifying a terminal may be described in a program, and the terminal may thus be identified through a nearby communication terminal by software, e.g. 176 col./line(s): 24/30-35.

4. Claims 1, 2, 4-9, 11-17, 19, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Richenstein et al. US 20030083024 A1 (Richenstein).

Re claims 1, 2, 4-9, 11-17, 19, 20, Richenstein disclosed



Referring to FIG. 1, one embodiment of a wireless communication system according to the invention is wireless headphone system 10 that includes transmitter subsystem 12 that communicates with headset unit 14 via infra-

Art Unit: 2613

red (IR) or radio frequency (RF) signals 16, preferably a formatted digital bit stream including multi-channel digitized audio data, calibration data as well as code or control data. The data being transmitted and received may comply with, or be compatible with, an industry standard for IR data communications such as the Infra Red Data Association or IRDA, paragraph 33.

Transmitter subsystem 12 IR transmitter section 18 including IR transmitter 20, such as an infra-red light emitting diode or LED, driven by an appropriate IR transmitter driver 22 receiving digitized audio data from one or more digital signal processors, or DSPs, such as DSP encoder and controller 24, 27, 28 and/or 30. The digital data stream provided by IR transmitter section 18 is preferably formatted in accordance with any one of the proprietary formats described herein below with reference to FIGS. 3, 10 and 16, paragraph 34.

The digitized audio data may be applied to IR transmitter driver 22 from a plurality of such DSP encoder and controllers that are combined in signal combiner/multiplexer 32 that may be separately provided, combined with IR transmitter section 18 or combined with DSP encoder and controller 24 in master controller 26. Master controller 26 may be included within a first audio device, such as audio device 34, provided as a separate unit or included within IR transmitter section 18, paragraph 35.

In a system configuration in which master controller 26 is included within audio device 34, wireless headphone system 10 including audio device 34, IR transmitter section 18 and headset unit 14 may advantageously serve as a base or entry level system suitable for use as a single channel wireless headphone system that, in accordance with the proprietary formats described herein below with regard to FIGS. 3, 10 and 16 may be easily upgraded for use as a multi-channel wireless headphone system. For illustrative purposes, audio device 34 is depicted in FIG. 1 as including audio stage 36, having first and second audio sources such as line 1 source 38 and line 2 source 40 each connected to stereo processing circuitry such as stereo channel 1 circuitry 42, the output of which is applied to master controller 26. Audio device 34 thereby represents any audio source including mono and stereo radios, CD and cassette players, mini-disc players, as well as the audio portions of electronic devices that provide other types of signals such as computers, television sets, DVD players and the like, paragraph 36.

Referring again to FIGS. 1 and 4, one important task in maintaining proper operation of system 10 is to maintain synchronization between the operations, particularly the sampling and/or A/D operations of transmitter subsystem 12 and the decoding and related operations of headset receiver unit 14. Although synchronization may be maintained in several different ways, it has been found to be advantageous particularly for use in a system (such as system 10) including a possible plurality of battery powered remote or receiver units (such as headset units 14) to synchronize the timing of the operations of headset receiver units 14 to timing information provided by transmitter subsystem 12 and included within IR signals 16 to assure that the synchronization was accurately achieved for multiple receiver units that may be replaced or moved between automobiles from time to time,

Art Unit: 2613

paragraph 66.

5. Claims 1, 2, 4-9, 11-17, 19, 20, are rejected under 35 U.S.C. 102(e) as being anticipated by **Milley et al.** US 20020186676 A1 (Milley).

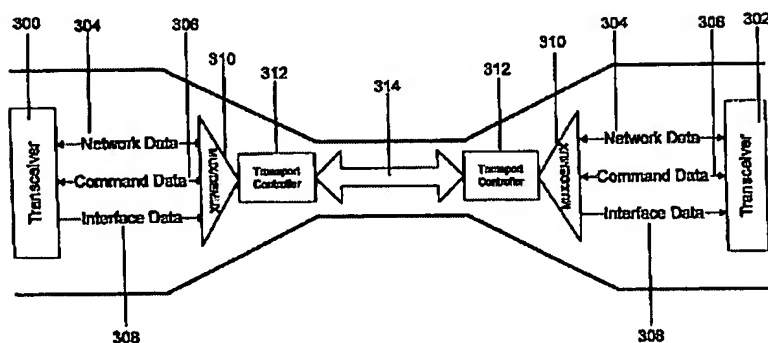
Re claims 1, 2, 4-9, 11-17, 19, 20, **Milley** disclosed

FIGURE 9A

The present invention is directed to methods and apparatuses for wireless network computing where the collaboration of two or more devices provides functionality not possible from a single device. The methods disclosed herein may be implemented in cellular phones, PDAs, handheld computers and other mobile devices and allow users to wirelessly control other devices capable of displaying full Internet content. In particular, the invention is directed to wireless Internet computing using remote display devices and handheld computers, e.g., paragraph 21.

For all of the above data flow scenarios shown in FIGS. 9A to 9E the flow is bi-directional. Thus the three transmitted data streams (304, 306, 308) from the first transceiver (300) sent to the second transceiver (302) undergo the same process as if the three data streams were transmitted by the second transceiver (302) to the first transceiver (300). On the system block diagram shown in FIG. 1B, the transceivers (22,40) are the same transceivers as shown in FIGS. 9A-9E (300, 302); thus the transport systems (52, 54) are the combinations of multiplexers/demultiplexers (310, 316) and transport controllers (312), and the medium (56) carries all of the signals (314, 318, 320, 322, 324, 326, 328, 330, 332, 334) e.g., paragraph 113.

A transport controller (312) can be several layers of software, an implementation in hardware/firmware, or a combination of the two. The transport controller (312) packages, assembles, modulates and transmits data. The controller will also receive, demodulate, unpack and disassemble received data to recover information transmitted by the other device. The packaging and assembly process will involve any or all of



Art Unit: 2613

formatting, compressing, digital signing, encrypting, and the addition of error correction. The unpacking and disassembly process will retrieve the original transmitted information by error correcting, verifying, decrypting, uncompressing, and restoring the received data as necessary. The transport controller (312) also filters out received data, which is not part of the method or part of the communication between devices. In addition to the above, the transport controller (312) would also control the connection between two or more devices, including link loss, and other characteristics. It is also possible that the transport controller (312) will not modify the data at all, e.g., paragraph 114.

A multiplexer/demultiplexer (310, 316) could be any device, implemented in software, hardware, or a combination of software and hardware that combines (multiplexes) multiple input streams of information to produce fewer output streams of information. Multiplexed streams can be separated (demultiplexed) to obtain the original streams of information. An example of software multiplexers (310, 316) is the GSM TS 07.10 standard, of which a subset is used in the Bluetooth protocol, e.g., paragraph 115.

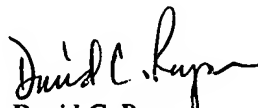
### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tigwell US 5227780, Face et al. US 20030094856 A1 disclosed remote optical controlled devices.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7:00a - 4:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dcp

  
David C. Payne  
Primary Examiner  
AU 2613